

Extension Service  
U. S. Dept of Agr.  
Washington 25, D. C.

EXTENSION NUTRITION CONFERENCE

EASTERN STATES  
New York City  
March 1-3, 1949

An Eastern Regional conference of Extension Service directors, nutritionists and marketing specialists interested in consumer education was held in New York City on March 1, 2, and 3. This report contains brief summaries of talks and discussions from those sections of the program in which nutritionists participated.

From the nutritionists' point of view the conference had two purposes, to discuss (1) methods of teaching nutrition and (2) interlocking responsibilities of staff members concerned with marketing projects being conducted in co-operation with the Research and Marketing Administration.

Before deciding on the program the Federal extension nutritionist personally consulted the majority of State nutritionists in the region. Tentative program suggestions were listed and sent to nutritionists in Maine, Massachusetts, Pennsylvania, and West Virginia. Keeping their ideas and preferences in mind, field agents of the Eastern region, the Federal nutritionist, and the marketing specialist in charge of the consumer education program developed the final program.

State nutritionists who attended the conference:

Connecticut -- Janina M. Czajkowski  
Delaware -- M. Gertrude Holloway  
Maine -- Dr. Kathryn Briwa  
Maryland -- Margaret McPheters  
Massachusetts -- May E. Foley  
New Hampshire -- Elizabeth E. Ellis  
New Jersey -- Mrs. Helen B. Robbins  
New York -- Lillian Shaben, Therese E. Wood, Mrs. Lola T. Dudgeon,  
Nellie E. Thompson, Mildred Dunn, and Elizabeth J. Vollmer.  
Pennsylvania -- Sara R. Warren, Marguerite Johnson, and Mary Reissinger.  
Rhode Island -- Violet B. Higbee  
Vermont -- Anna Wilson  
West Virginia -- Eloise Cofer

United States Department of Agriculture home economists who attended:

Mary Louise Collings, Home Economist  
Amy Cowing, Educationist  
Eleanore Davis, Extension Nutritionist  
Florence Hall, Field Agent, Eastern Region  
Mary Rokahr, In Charge, Home Economics Section  
Gertrude Warren, 4-H Club Organization Specialist



PROGRAM

NORTHEAST REGIONAL EXTENSION CONFERENCE  
FOOD MARKETING  
EXTENSION DIRECTORS, NUTRITIONISTS, AND FOOD MARKETING SPECIALISTS  
BARBIZON PLAZA HOTEL, New York, N. Y.  
March 1-2-3, 1949

TUESDAY - MARCH 1 - MORNING

THEME: Extension's Program in Food Marketing

General Session - L. G. Cook, Chairman

- 9:30 - 10:45 Effect of Processing Methods on Nutritive Value of Food.  
--Dr. David B. Hand, Head, Division of Food Science  
and Technology, New York State Agricultural Experiment  
Station, Geneva, N. Y.
- 10:45 - 12:00 Place of Food Marketing in the Extension Service Program  
--L. A. Bevan, New Hampshire

TUESDAY - MARCH 1 - AFTERNOON

General Session - L. G. Cook, Chairman

- 1:30 - 2:30 How Extension Specialists Fit into the Food Marketing Program  
--Fred Cole, Mass., Mrs. Helen Robbins, N. Y.,  
Vera Caulum, N. Y., T. B. Symons, Md.
- 2:30 - 2:50 How Food Marketing Programs are Developing in Other States  
--Edwin A. Johnson, Extension Service, U.S.D.A.
- 2:50 - 3:30 Status and Outlook of Regional Consumer Marketing Programs  
--Carlton E. Wright, N. Y., Lorraine S. Houlihan, N. Y.  
W. A. Munson, Mass.

Separate Group Sessions

- 3:30 - 4:30 A. Directors - L. G. Cook, Chairman  
Progress Report--Status and Need of Extension Work in  
Urban Areas. --L. R. Simons, N. Y.
- B. Marketing Specialists  
Ways in Which the Marketing Specialists Can Participate  
in the Food Marketing Program.
- C. Nutritionists - Gertrude Holloway, Del., Chairman  
What Our Annual Reports Tell Us About Extension  
Nutrition Program --Mary Louise Collings, Extension  
Service, U.S.D.A.

WEDNESDAY - MARCH 2 - MORNING

Marketing Specialists - H. L. Stier, Md., Chairman  
R. B. Donaldson, Pa., Secretary

9:00 - 10:00 Appraisal Regional Marketing Workshop Held at Pennsylvania State College.

--Kenneth Hood, Pa.

10:00 - 11:00 Sources of Subject Matter for Marketing Information  
--S. R. Newell, Deputy Asst. Administrator for Marketing, P.M.A., U.S.D.A.

11:00 - 12:00 Exchanging Marketing Information and Marketing Contacts within Northeast Region.

--E. W. Bell, Mass.

Nutrition Specialists - Kathryn Briwa, Me., Chairman  
Margaret McPheeters, Md., Chairman

9:00 - 10:15 Methods of Reaching Young Homemakers  
--May Foley, Mass., Florence Hall, Extension Service, U.S.D.A., Sara Warren, Pa., Lillian Shaben, N. Y.

10:30 - 11:15 Audio Visual Methods of Teaching  
--Eleanore Davis, Extension Service, U.S.D.A.

11:15 - 12:00 In What Way Can Extension Nutritionists Best Serve County Extension Agents  
--Mrs. Ruth Clark, Conn., Eloise Cofer, W. Va., Marguerite Ide Erickson, Pa.

Extension Directors - L. G. Cook, Chairman

9:00 - 12:00 Executive Session

Discussion of Chapter V of the Joint Committee Report on Extension Program, Policies and Goals--  
The Extension Service within the U. S. Department of Agriculture.

--M. L. Wilson and State Directors

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WEDNESDAY - MARCH 2 - AFTERNOON

Joint Session, Marketing and Nutrition Specialists - Kenneth Hood, Pa., Chairman  
Elizabeth Ellis, N.H., Sec'y

1:30 - 2:30 Writing that Sells Ideas  
--Mrs. Amy Cowing, Extension Service, U.S.D.A.

2:30 - 3:30 What U.S.D.A. is doing to Establish Consumer Grades for Meat,  
Poultry, Eggs, Fruit, Vegetables and Dairy Products  
--John I. Thompson, Asst. Administrator for Marketing,  
P.M.A., U.S.D.A.

Nutrition Specialists - Anna M. Wilson, Vt., Chairman  
Violet Higbee, R. I., Secretary

3:30 - 4:30 Obtaining Reports from Homemakers that Will Help Us Analyze  
the Effectiveness of Our Teaching  
--Mary Louise Collings, Extension Service, U.S.D.A.

Marketing Specialists

3:30 - 4:30 What's New in Marketing--Prepackaging--Merchandising

Extension Directors - L. G. Cook, Chairman

1:30 - 4:30 Pushing Forward the 4-H Club Program - Progress Report  
--L. A. Bevan, Chairman N. E. Committee on Sustained  
4-H Club Program

Some Highlights of National Extension Young Adults Planning  
Conference  
--W. A. Munson

Extension Finances and Personnel Needs  
--Asst. Director W. H. Conway and State Directors

Extension's Public Relations Program  
--Round Table. State Directors

If Farm Prices Continue to Fall, What Change Should be Made in  
the Extension Program to Help Farmers Meet the Situation?  
--Round Table. State Directors

THURSDAY - MARCH 3 - MORNING

Marketing Specialists - J. L. Tennant, R. I., Chairman  
R. S. Boal, W. Va., Secretary

- 9:00 - 10:15 An Appraisal of Extension Marketing Committee Report  
--J. F. Hauck, N. J., H. L. Stiers, Md.
- 10:15 - 11:30 Common Problems and Plans for 1949  
--Round Table
- 11:30 - 12:00 Consideration of Items to Go into Report to be Made to the  
Joint Session on Afternoon of March 3

Nutrition Specialists - Janina Czajkowski, Conn., Chairman  
Elizabeth Vollmer, N. Y., Secretary

- 9:00 - 10:00 Common Problems - Round Table
- 10:00 - 10:45 Characteristics in the Development of Younger 4-H Club Girls  
which Should Receive our Basic Consideration  
--Dr. Louise Bates Ames, Child Study Center,  
Yale University, New Haven, Conn.
- 10:45 - 11:30 How Can We Apply This Information When Organizing Subject  
Matter for Teaching or When Writing 4-H Bulletins  
--Discussion Leader - Mrs. Lydia Lynde, Extension  
Service, U.S.D.A.
- 11:30 - 12:00 Consideration of Items to Go into the Report to Be Made to the  
Joint Session on Afternoon of March 3

Extension Directors - L. G. Cook, Chairman

- 9:00 - 12:00
1. Unfinished Business - Any item from preceding day or other  
necessary action
  2. Follow-up on Regional Brucellosis Conference - Chas. E. Potter
  3. Plans for Regional Conferences: Directors and State Club  
Leaders. Report of Director Worrilow on Farm and Home  
Management Conference. Next Meeting of Directors.
  4. Election of Officers

THURSDAY - MARCH 3 - AFTERNOON

General Session - L. G. Cook, Chairman

- 1:30 - 3:00 Reports from Nutritionists and Marketing Specialists
- 2:00 - 3:00 Recent Advances in Nutrition  
--Dr. Charles Glen King, Scientific Director,  
Nutrition Foundation, New York City



## EFFECT OF FOOD PROCESSING ON NUTRITION

Dr. David B. Hand

A food processor has two goals: (1) To preserve foods and (2) to improve their acceptability. The two are often opposed and create nutritional problems.

Processing alters the vitamin content of a food. The percentage retention of vitamins in processed meat is about equal to that in cooked fresh meat -- thiamine and pantothenic acid, 63 to 73 percent; riboflavin and niacin, above 90 percent. Thiamine is stable at most storage temperatures. Protein is not damaged by processing.

A canner of fruits and vegetables is concerned with vitamin C and thiamine. Quick heating actually preserves vitamin C, so rapid cooking is an aim in canning.

The selection of varieties is fully as important as methods of processing, and the handling prior to processing is as important as the processing. Normal respiration causes losses in vitamin C and sugar and an increase in fiber and toughness. For example, corn will lose one-half of its sugar in overnight transit in warm weather unless cooled to 40°F. Rapid cooking and prompt cooking minimize the changes.

Loss of nutritive value is the fundamental problem in attempts to transform foods. Do added benefits offset nutritive changes when wheat is transformed into patent flour, when rice is polished, or when mixes are prepared?

Possibilities for further improvements were briefly discussed. We may expect the development of improved varieties of fruits and vegetables; improvement of yields and quality, and of grades and standards; improved methods of processing, as well as lowering of costs and utilization of surpluses; and basic studies on the composition and chemical changes in food products. We may expect little development of synthetic foods or of the fortification of foods.

### HOW EXTENSION SPECIALISTS FIT INTO FOOD MARKETING PROGRAMS

Where RMA funds are used, a marketing specialist is assigned as leader of the project. All specialists in the fields of production, marketing, and nutrition have a responsibility. The marketing specialist should be aware of that responsibility, and all specialists should recognize it in their plan of work.

Specialists should assist agents and industry in identifying problems and in developing plans for action to fit the requirements. They should train county personnel; give them courage to face what is sound and real; supply a continual flow of clear, concise marketing information; furnish visual aids, written materials, and other educational tools; and move forward with strong and active faith.

Nutritionists can also do much toward taking to consumers information on food buying, availability, nutritive value of foods in comparison with cost, and on ways of using available foods in family meals and of processing them for future use. They also have a public relations job with producers, handlers, retailers, and consumers. In discussion, the group emphasized the need for an educational program with retailers.



## EXTENSION RMA FOOD MARKETING PROGRAMS

Edwin A. Johnson

The Extension Service is now conducting 14 food marketing programs in co-operation with RMA. It is likely that eight new programs will be started in 1949 and that some of the present programs will expand in scope.

At present there seem to be four major fields of work in which educational programs can help consumers:

1. Information concerning the availability of various products.
2. Knowledge of common quality differences in food products.
3. Skill in effective utilization and preparation of food products.
4. Knowledge of the effect of market organization and services on the price and quality of food products.

States that have RMA projects are Alabama, Georgia, Louisiana, South Carolina, Oklahoma, Kentucky, Maryland, Delaware, Connecticut, New York, Michigan, Utah, Wisconsin, and Washington. There is also an RMA project in Puerto Rico.

The projects range in scope from one designed to increase the consumption of dried milk in a single metropolitan area, to one planned to provide a marketing service and consumer education program for an entire State.

### STATUS AND OUTLOOK OF REGIONAL CONSUMER MARKETING PROGRAMS

Learning how to function in the world's largest metropolitan area is a challenge the two New York marketing people accepted as their first job. There are many local sources of information ~~about~~ supplies of fruits and vegetables. When assembled and made available, this information is a guide to the food buyer.

The marketing specialists prepare a weekly food marketing bulletin, plus a news release and a radio release based on the bulletin. The New York newspapers and some of the national magazines receive the bulletin regularly at their own request. Consideration has been given to the time of distribution so that the press receives market information while it is up-to-date.

The specialists find that the principle of leadership applies to urban as well as rural areas. For instance, their time is more effectively spent in working with welfare workers who reach thousands of people, than with individuals or small groups. They are now exploring a means of reaching union members.

The proposed New England Food News Service will disseminate market and nutrition information to extension workers in the New England States and also to radio and newspaper services in the area. In addition to the material to be made available from the proposed Boston office, at least one of the staff will work directly with State people in much the same way as a USDA extension specialist helps with work in State and county programs.



## EVALUATING THE REPORTS OF NUTRITION SPECIALISTS

Mary Louise Collings

A good deal of subjective judgment enters into an appraisal of annual reports. Even so, it is still an experience worth while to read such good reports as some of those written by nutrition specialists in this region. There is wide variation in the extent to which various specialists describe the details of what, and how, work in their subject matter fields was done. The annual narrative report outline suggests certain phases of the specialists' jobs which are of particular value to those reading reports.

Using those outlines as a guide, we might appraise the nutrition reports by the extent to which they picture clearly, and in adequate detail, the following:

1. The nutritional and health situation in the State.  
Only one or two specialists in this region wrote in their reports for 1947 about how they obtained, analyzed, and used facts on the State situation regarding nutrition and health.
2. The objectives of the program (stated in terms of changes in behavior of people.)  
Only one or two specialists listed objectives. One of these reports not only included a fine statement of objectives in terms of knowledge and skills of homemakers to be stressed but listed in detail the objectives sought in the leader-training program.
3. The function of the specialist in program planning.  
Only occasionally specialists mentioned the way they functioned in program planning. (See figures on average number of communities in which agents taught food selection and preparation.)
4. Major activities.  
Most specialists devote the greater part of their reports to this type of material. Yet, their descriptions of methods are largely in general terms; very few specialists give details of technique or teaching devices used. (See figures on average number of days devoted by agents to food selection and preparation.)
5. Assistance given to county home demonstration agents.  
About half of the specialists in the northeastern region wrote in 1947 of assistance they gave agents by means of training conferences for agents.
6. Cooperative work with other agencies.  
Most specialists wrote in some detail of cooperative work with other agencies. (See figures on average number of schools assisted with school lunches and health clinics held by home agents in cooperation with other agencies.)
7. Assistance given to or received from other specialists.  
A goodly number of the State specialists have work under way in cooperation with other specialists on their own campuses. This work, ranging from a joint parent education and child feeding project to farm and home planning work, was described in some detail by specialists.



8. Evaluation or results.

Only occasionally specialists described this phase of their work. Some of their comments in this section of their reports, however, were most thoughtful and worth while. (See average number of leaders assisting and average number of families reached per county home agent.)

All these phases are part of a good report. Balance in reporting on each of those topics rather than overemphasis on a few is desirable. Greater detail about objectives and methods would strengthen reports materially.

NUTRITION AND HEALTH DATA - NORTHEASTERN STATES

1947

(From Statistical Summary)

State	Ave.no.: days devoted by HDA*	Ave.no.: commu- nities*	Ave.no.: schools with school lunch	Ave.no.: nutri- tion and health clinics	Ave.no.: leaders food select. and prep.	Ave.no.: families assisted to im- prove diets	Ave.no.: families assisted in food preser- vation.	Ave.no.: families assisted in child feeding.
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Northeast- ern States	41	19	11	6	47	718	682	99
Conn.	18	15	8	-	28	296	1,170	22
Dela.	12	23	5	4	36	415	777	4
Maine	17	26	4	6	40	626	222	51
Md.	29	19	9	3	39	450	406	104
Mass.	29	21	15	2	76	1,200	1,886	133
N.H.	28	22	4	-	46	415	465	113
N.J.	34	17	12	-	18	2,499	1,493	240
N.Y.	55	23	45	12	77	1,133	1,099	137
Penn.	56	11	9	3	21	319	324	31
R.I.	23	12	2	-	114	289	507	26
Vt.	33	26	9	1	33	409	395	28
W.Va.	30	21	9	9	38	358	343	247

\* Figures in Columns 1, 2, and 5 confined to food selection and preparation data.



## Methods of Reaching Young Homemakers

May E. Foley

Nutritionists are concerned because comparatively few young homemakers are being reached through the Extension Service. Bureau of the Census figures show that in 1948 there were 40 per cent more children under 5 years of age than in 1940.

A survey in one State indicates that 45 per cent of the women attending Extension Service meetings had no children under 21 years of age, and only about half of the other 55 per cent had children under 6 years of age. Other studies show that one-fifth or fewer of the women attending meetings are under 30 years.

### Why don't more young homemakers come to meetings?

- (a) Young homemakers prefer meeting in groups by themselves.
- (b) They often feel that they are not really wanted by the older women; that their children bother them, but there is no one to leave the children with.
- (c) Their needs and interests are different. They want information about feeding young children, food buying, fundamentals of food preparation, how to do jobs the easiest way.
- (d) Meetings are not at a convenient time and are often too long.

### How can we interest mothers of young children in meetings?

- (a) Encourage older club members interested in younger women to sponsor groups especially for young homemakers; organize brides' groups; reach young homemakers through extension groups of young men and young women.
- (b) Have each club member make contacts with four young homemakers. Closely coordinate the foods and nutrition project with other related projects, such as family life, clothing, home management, or work out a project together where these related projects are one.
- (c) Have young farmers' and young homemakers' groups work together on interesting problems.
- (d) Use enrollment cards for each group, listing number and ages of children, and check often to keep yourself informed.
- (e) Plan programs of special interest to young homemakers; give young homemakers a voice in planning county program.
- (f) Have short homemakers' meetings and leader-training meetings at night.
- (g) Train some young homemakers as leaders.
- (h) Have some older women come to regular training meetings and then give the work to younger homemakers.
- (i) Have more young homemakers participate in their own meetings.
- (j) Use radio and letters to better advantage.
- (k) Bring before club members the fact that industries are taking note of the increased number of babies and are increasing the output of their goods accordingly; such as children's clothes, children's equipment, school equipment, and toys.

### In what ways can we reach young homemakers other than through meetings?

- (a) Home visits.
- (b) Interesting, chatty, timely letters about specific problems of special interest to young homemakers.
- (c) Radio, magazines, and newspapers.
- (d) Special movies.
- (e) Contacts with groups other than Extension; such as parent-teacher associations and public health department clinics.
- (f) Special public meetings of interest to mothers or young homemakers.

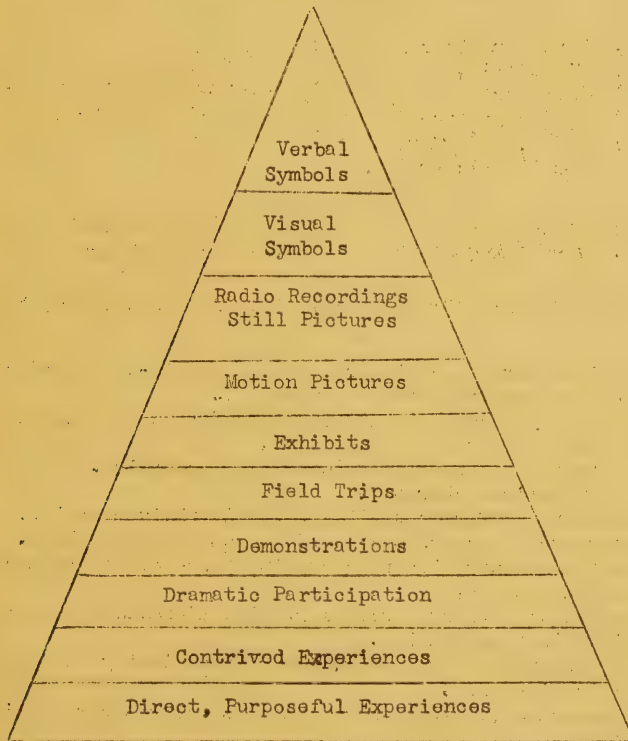


AUDIO-VISUAL AIDS  
Eleanore Davis

The extension nutritionists have expressed a need for information on methods of teaching nutrition to adults. There is little research. Kurt Lewin's research<sup>1</sup> on the group decision method of altering food habits is basic, but we have no evidence of its use by Extension.

Two guides on the effectiveness of teaching methods were discussed. One, a study by the Division of Field Studies and Training, <sup>2</sup>/indicates that if exposed in five different ways, approximately seven out of every eight families receiving Extension information will change their behavior.

The other was Edgar Dale's "Cone of Experience," as described in his book, "Audio Visual Methods of Teaching."



1. The Problem of Changing Food Habits, National Research Council Bulletin No. 108.

2. Extension Teaching Requires Many Methods. Division of Field Studies and Training, Extension Service, United States Department of Agriculture.



## AUDIO-VISUAL AIDS (Cont'd)

The cone is a visual aid to explain the interrelationships of the various types of audio-visual materials, as well as their individual positions in the learning process. It consists of 10 bands. Each band represents a stage between two extremes--between direct purposeful experience and pure abstraction. It is merely a guide, and cannot be taken too literally.

Actual teaching methods taken from nutritionists' annual reports and illustrative material furnished by a few State nutritionists were used in studying the cone.

It conveniently subdivides into three major groups.

- |                                       |   |   |
|---------------------------------------|---|---|
| (1) Direct experiences                | ) | Involve DOING in order of decreasing directness         |
| (2) Contrived experiences             | ) |   |
| (3) Dramatic participation            | ) |   |
|                                       |   |   |
| (4) Demonstrations                    | ) | Involve OBSERVING in order of decreasing directness     |
| (5) Field trips                       | ) |   |
| (6) Exhibits                          | ) |   |
| (7) Motion pictures                   | ) |   |
| (8) Radio, recordings, still pictures | ) |   |
|                                       |   |   |
| (9) Visual symbols                    | ) | Involve SYMBOLIZING in order of increasing abstractness |
| (10) Verbal symbols                   | ) |   |

## IN WHAT WAYS CAN EXTENSION NUTRITIONISTS BEST SERVE COUNTY EXTENSION AGENTS?

1. Provide latest research information and up-to-date subject matter.
2. Help provide good illustrative material.
3. Give agents an occasional listing of reference books and materials.
4. Give training to agents and leaders.
5. Keep in touch with basic problems in the counties.
6. Know the agent's background.
7. Have frequent conferences with agents in their counties.
8. Conduct refresher courses on subject matter and methods.
9. Coordinate the nutrition project with those of other specialists and organizations.
10. Help agents with program planning. Occasionally attend program-planning meetings in the counties.
11. Send agents digests or chatty, interesting letters that tie up with some specific situation.
12. Keep in touch and help with radio talks so that correct information is given out.
13. Help agents evaluate the nutrition project.
14. Answer agents' requests immediately
15. Practice good nutrition yourself.

## WRITING THAT SELLS IDEAS

Amy Cowing

Before the conference each State was given the opportunity of having one or more nutrition marketing bulletins analyzed for readability, as measured by the Flesch formula.

Mrs. Cowing used the results of this analysis as her starting point in discussing "writing to multiply you."

The success of any publication depends on how well you know your subject, how carefully you think it through, and how skillfully you plan it. Planning on paper pays. When you plan, select:

- What you want to teach.
- Whom you want to reach.
- Why you are putting it on.

Select essential facts necessary to give information clearly.

Sort and arrange facts in logical order.

Sell ideas and practices.

Say:

- In short sentences.
- In short words.
- In personal words.

### OBTAINING REPORTS FROM HOMEMAKERS THAT WILL HELP US ANALYZE THE EFFECTIVENESS OF OUR TEACHING

Mary Louise Collings

Extension specialists in many States have developed small questionnaires or report forms which they use to collect information on the adoption of practices. Specialists need to consider two problems in connection with the use of such report forms. First is the problem of what questions to ask and how to word those questions. The second problem is who should be asked to answer these questions. The latter problem has to do with the sampling method used.

The questions used should be discriminating questions, which really make a difference in indicating those who have been benefited by some fundamental part of extension teaching. By getting such basic information from year to year the specialist and agent can show progress in an area of teaching that really makes a difference. Too often, different questions are used each year to get answers to short time and superficial phases of a subject matter field.

Care should be taken to word questions in such a way as to make them clear to lay people. The use of pre-testing questions with some representative people helps to clear up misconceptions due to use of professional or ambiguous terms.

When getting homemakers to answer questions about their food practices, specialists will want to get some additional information about the families themselves that will help in interpreting the answers on food practices. Such information is called "face data." If studied in relation to the answers to food questions, this information helps the specialist and agent to understand the factors related to the adoption of food practices.



OBTAINING REPORTS FROM HOMEMAKERS etc. (Cont'd)

Often the specialist and the agents are disappointed because so few of the persons to whom questionnaires are given bother to return them. It is likely in most cases that those who have something good to report are the ones who do the reporting. It would give the specialist and agent a truer picture of the situation to select by random methods a smaller number of participants and ask them to report, following up with additional requests to those who do not return the report forms.

Confidential--Not To Be Quoted

CHARACTERISTICS IN THE DEVELOPMENT OF YOUNGER 4-H CLUB GIRLS  
WHICH SHOULD RECEIVE OUR BASIC CONSIDERATIONS

Dr. Louise Bates Ames.

The Child Study Center at Yale University is in the midst of a study of behavior patterns of adolescent boys and girls. Dr. Ames is not ready to put anything into writing until the study has been completed and the findings released by Yale University. This summary was prepared by a State specialist who took notes. You will find it useful as background information, but please do not quote.

Three main drives motivate an adolescent.

1. He is trying to find himself and his place with others.
2. He is working to get free of adults. An adult may want to help him, but the foundation for confidence must have been laid much earlier.
3. He must work out something with the opposite sex.

It requires patience, willingness, and skill to work with this group. The program needs to be flexible and easily varied.

A. Mother-child relationship.

- Age 10 The relationship is simple, straightforward. The child accepts a mother's ruling force without question and with little or no resentment.
- Age 11 The child is the center of the world. He mocks his parents, and works against ruling forces, especially his mother. He feels the need of her but strikes out against her. the 11-year-old argues, complains, exaggerates, and dramatizes.
- Age 12 He may emerge from this battle to be more diplomatic, more tolerant, and easier to get along with. He is enthusiastic, but variable, childish at one time, adult at another.
- Age 13 He has separated himself from adults, acts superior, stands off, is critical of mother. If allowed to make the approach, he will talk things over with an adult.

CHARACTERISTICS IN THE DEVELOPMENT OF YOUNGER 4-H CLUB GIRLS etc., (Cont'd)

B. Sense of self

- Age 10 He is quite matter-of-fact, childlike and simple, rather objective.
- Age 11 The 11-year-old is self-centered and seems to be trying to define himself. He is jockeying for a position with his friends. His problems are generally unrealistic. He needs money, wants his own room. He is clumsy and dramatic.
- Age 12 This is an ideal age for the new and exciting, but he wants to think of himself. He hates to be treated as a baby, is self-confident and enthusiastic. He likes to talk about himself. This is a good age for introducing music and sports. He is indifferent to tasks he may have performed willingly up to this time.
- Age 13 The child of this age is often searching for answers within himself. He is more quiet and self-contained, is secretive, sensitive, morose, lethargic, moody; lives in a world of dreams. He thinks about big problems of the world. Differences between sexes are marked. He still knocks down adults. He has tremendous energy and is responsible about jobs he takes upon himself, such as a paper route.

C. Reaction to school, clubs, Sunday school.

- Age 10 School and teachers are okay. The child is docile and relatively practical about things. He compares teachers, passes notes, is restless, has a short span of interest, plans tricks on other children. Sunday school is a bore; he is enthusiastic about clubs.
- Age 11 A battle for status is going on, yet the child is fairly docile in situations outside of the home. He is careless, forgetful, secretive, restless, and has a short attention span. Girls and boys are aware of each other in groups, but very gauche in approach. They do things against the teacher, such as passing notes. They push one another, tease, grab, and chase. Home work is a problem and is put off usually until the last thing. An 11-year-old may be critical of teaching or teachers and rebel, but under his breath. He is still bored with Sunday school. Most of them enjoy clubs.
- Age 12 A battle for status between teacher or club leader and child exists. In heterosexual groups there may be a lot of passing of lewd notes and remarks. A teacher must be open-minded, wise and casual in dealing with this. The child dislikes school, is critical of teachers, but may be sympathetic toward them. At this age he shows great enthusiasm. Physical skirmishing is prevalent. He still does not want to go to Sunday school and for about a year he may be critical of clubs, such as Scouts. It is time to attempt new things. He may leave the club either from lack of interest or because "no one else does it." He does not want to be treated like a child.



## CHARACTERISTICS IN THE DEVELOPMENT OF YOUNGER 4-H CLUB GIRLS etc., (Cont'd)

Age 13 He is seclusive, draws apart from parents and teachers, is critical of adults in general. He may try them out, but he has respect for authority. He evaluates a teacher and her methods of teaching. Some still dislike Sunday school; others go back if the teacher is very good. Scouts are out. He may say, "No one of our group still goes." Some may go and like it if the leader is very good. The child of this age will respect leadership and discipline and is critical of the adult who cannot handle him.

In summary Dr. Ames stated that it is natural for adolescents to lose interest. If an adult proves his ability for leadership, gives club members some choices but not too many, works around the children rather than through them, and has the ability to drastically change the character of club activities, the leader may be able to hold members through this period. If so, the interest later may be even keener than before.

The terrific variation between children of these ages makes it difficult for a leader when they belong to the same club. Mrs. Lyndia Lynde used the role-playing technique to help the group think through what happens in a family when a 4-H girl is asked to prepare four breakfasts.

### NEW ADVANCES IN THE SCIENCE OF NUTRITION

Dr. Charles Glen King

The isolation of B<sub>12</sub> has perhaps been the most exciting recent single event relative to human nutrition. Having definite material with which to control pernicious anemia and related neurological disorders represents a major contribution.

Animal experimental studies on cancer show that certain strains of animals have high requirements for riboflavin and a high incidence of cancer. Similar studies have been repeated in relation to choline. These new leads open paths for investigation in regard to the relationship between nutritive requirements and cancer in human beings.

Eating too much is probably the worst single fault in the American diet today. This subject needs increased emphasis in nutrition education and in research.

The effect of fluoride therapy on dental caries does not lessen the need for an educational program on the importance of a good diet during the prenatal and early postnatal period of tooth development.

Great strides have also been made in regard to proteins and the interrelationships of the amino acids.

For more detail read "New Advances in the Science of Nutrition," by Charles Glen King, Journal of the American Dietetic Association, February 1949.



REPORT FROM NUTRITIONISTS  
GENERAL SESSION  
Thursday, March 3, 1949

1. We appreciate the directors making it possible for the nutrition specialists to have this conference, which has been most helpful.

The specialists, as a group, feel that conferences like this strengthen their program.

- a. We like to know what the other States are doing, their methods that work, and those that do not work.
  - b. We need to learn and like to hear, firsthand, of new ideas developing in our field.
  - c. We need more research in effective new methods of teaching nutrition.
2. Impressed with new opportunities in the marketing program, we should like to cooperate from the beginning in working out a constructive program.
  3. County staffs may need to become familiar with the marketing act and aware of the possibilities in the development of the educational program.
  4. The specialists recognize their lack of experience and their need of training in the principles and practices of a good marketing program.
  5. Recognizing this new opportunity, we should like, as plans are developed, to have both marketing and nutrition specialists meet again on an area or regional basis.
  6. We recommend that at definite intervals the Family Life Section of the Outlook Conference place special emphasis on food economy, and that the extension nutritionists be invited. With the rapid development of the marketing program, 1949 would be an appropriate time.

Elizabeth Ellis, Chairman  
University of New Hampshire  
May E. Foley  
University of Massachusetts  
Lillian Shabon  
Cornell University



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